

## RESPONSE TO PUBLIC COMMENTS

From December 22, 2006 to February 4, 2007, the United States Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) solicited public comments on a draft NPDES permit, developed pursuant to an application from the Massachusetts Bay Transportation Authority (MBTA) and Massachusetts Bay Commuter Railroad Corporation (MBCR) for the Massachusetts Bay Transportation Authority's Commuter Rail Maintenance Facility. After a review of the comments received, EPA has made the final decision to issue the permit authorizing the discharge. The following describes and responds to comments, and describes any subsequent changes to the draft permit. A copy of the final permit may be obtained by writing or calling Michele Cobban Barden, United States Environmental Protection Agency, 1 Congress Street, Suite 1100 (CMP), Boston, Massachusetts, 02114-2023; Telephone (617) 918-1539.

### A) Comments dated February 2, 2007 by Scott Darling III, Environmental Counsel, Massachusetts Bay Transportation Authority.

Comment A.1.: *The draft NPDES Permit as proposed identifies tasks and conditions to be performed by individual permittees as well as certain tasks and conditions to be performed by all of the permittees as a collective whole. While the MBTA strongly supports such a break out of tasks and conditions, the MBTA believes that additional clarity and direction must be provided in the final NPDES Permit to avoid complicated compliance issues if one, or some combination, of the permittees fail to perform or to participate in the joint tasks and conditions identified in the NPDES Permit.*

**Response:** The co-permittees are responsible for discrete tasks associated with storm water runoff from areas under their control and storm water collection and transport systems they own and operate. All of the co-permittee requirements are found in sections B, C and E of the permit. The permittees, MBTA and its contractor MCBR, are responsible for the remaining permit conditions including the monitoring of the discharge.

We have reviewed the permit conditions and made several changes to ensure that responsibilities are clear and that the required tasks are scheduled in a manner that will lead to an orderly and expeditious completion of the Collection System and Facility Evaluation Studies. The major change has been recognition that the co-permittees, as dischargers to the MBTA/MCBR collection and treatment system, must submit their studies to MBTA/MCBR before MBTA/MCBR can be expected to complete system-wide study. Therefore, we have required the co-permittees to submit their Collection System and Facility Evaluation Studies to EPA, MassDEP and MBTA/MCBR by September 1, 2008. The MBTA must also submit their study to EPA and MassDEP by September 1, 2008 as consented to in their Administrative Consent Order dated April 25, 2007 with the MassDEP. EPA has extended the schedule for MBTA/MCBR to submit the integrated Collection System and Facility Evaluation Study to be submitted by December 30, 2008 to allow sufficient time to incorporate the co-permittees submittals into its study.



Comment A.2.: *The MBTA is concerned that such joint responsibility (e.g. outfall testing, infrastructure improvements, etc.) to perform certain tasks and conditions will fall disproportionately on one permittee and that there is not a mechanism in the draft NPDES Permit to ensure that all permittees fairly and proportionately share the responsibility of implementing these joint tasks and conditions. The MBTA recommends that the final NPDES Permit include a condition that within two(2) to three (3) months from the effective date of the final NPDES Permit, the permittees, individually and as a collective whole, submit to the U.S. EPA an Action Plan that lays out how each of the individual and joint tasks and conditions that are identified in the permit will be achieved. This Action Plan should identify the means, method and timing of each of the steps that the permittees will take to implement the individual and joint tasks and conditions.*

**Response:** As discussed in the previous response, the only permit requirements common to the permittees and co-permittees are the Collection System and Facility Evaluation Studies and the Storm Water Pollution Prevention Plans. The DCR and MBTA/MBCR are responsible for Section E. MBTA/MBCR are solely responsible for the other permit conditions.

Regulations found at 40 CFR Part 122.21(a) requires that the discharger of pollutants obtain an NPDES permit, and that when the facility is owned by one person and is operated by another person it is the operator's duty obtain the permit (40 CFR Part 122.21(b)).

As described extensively in the fact sheet, the permit for this facility was issued in 1976 to the Boston and Maine Railroad for the discharge from the oil/water separator, which was originally designed to treat process water and storm water runoff from the former Boston Engine Terminal (BET) railroad maintenance facility. The BET facility, adjacent rail lines and related facilities were later sold to the MBTA. The NPDES permit was then transferred to Amtrak, the contract operator for the MBTA at the time. A request for the permit to be transferred to MBTA was submitted by letter dated May 25, 2001. That letter stated that, "The Massachusetts Bay Transportation Authority (MBTA) has taken over responsibility for the ownership and operation duties of the discharge allowed under NPDES Permit No. MA0003590."

Based on this record, EPA believes that the MBTA is the appropriate permittee. In the draft permit, EPA also named the MBTA's current contract operator, MBCR, as a permittee based on its contractual relationship with the MBTA. Recognizing the complex history of the site and the contributions of flows from property outside the MBTA's control, EPA named the Boston & Maine Corporation (B&M), the City of Somerville and the Massachusetts Department of Conservation and Recreation (DCR) as co-permittees with specific responsibilities commensurate with their storm water contributions to the facility, or as in the case of DCR, to assure the proper operation and maintenance of the pumping facility.

As stated previously, EPA believes the permit clearly identifies the responsibilities of each permittee and co-permittee. EPA does not believe that an Action Plan as proposed by MBTA is a necessary component of this permit. Obviously, MBTA should coordinate with the co-permittees regarding the



specific information it will need from the co-permittees in order to complete its Collection System and Facility Evaluation Study, and is free to work with its co-permittees to prepare an Action Plan if it believes that this would expedite the completion of the permit requirements.

Comment A.3. *If additional contributors of storm water to Outfall 001 are identified, MBTA believes they should become subject to the same responsibilities and conditions identified in the final NPDES Permits as the other permittees currently listed. The MBTA recommends that the final NPDES Permit identify a mechanism by which the U.S. EPA may add additional permittees as new information becomes available.*

Response: The NPDES regulations found at 40 CFR 122.62 sets forth a procedure for the modification of a permit based on the receipt of new information.

Comment A.4. *A recent review of the MA DEP's current MCP Site Information Database indicates that the referenced MCP site has been linked to Primary Release Tracking Number (RTN) 3-0011533. According to the database, a Class C1 Response Action Outcome (RAO) Statement was filed for RTN 3-0011533 on July 1, 2005. MBTA acknowledges that this is new information, which should be included in the final Fact Sheet.*

Response: The RAO statement estimates that 3400 cubic yards of soil in the vicinity of the oil/water separator are contaminated with TPH and free-phase petroleum product (up to 0.6 feet thick). Groundwater in the immediate area is identified as impacted. There is no current remediation of this site and the Class C (temporary) RAO assumes that groundwater monitoring will be accepted as regulatory compliance under the Massachusetts Contingency Plan until the development of the NorthPoint Project is complete.

Given that the floors in chambers 1, 2 and 3 of the oil/water separator are permeable and the age of the collection system, EPA is concerned that there is potential for the infiltration of contaminated groundwater into the oil/water separator, the collection system and may be discharged to the Millers River. As the operator of the collection system, MBTA/MBCR must evaluate this potential. If it is determined that there is reasonable potential, EPA will modify to permit to include the appropriate effluent limitations. This requirement has been added to the final permit.

This new information also applies to the fact sheet. However, because the fact sheet is issued in conjunction with the draft permit and is not part of the final permit issuance, it will not be modified. This comment is part of the administrative record for the final permit pursuant to 40 CFR Part 124.18. This information does not require any changes to the permit.

Comment A.5. *The MBTA's Commuter Railroad Operations and the Facility covered by the draft NPDES Permit should be categorized as Industrial Activity "Sector P", Land Transportation and Warehousing, SIC Codes 4011 and 401, Railroad*



*Transportation. Under U.S. EPA's Proposed 2006 Multi-Sector General Permits for Storm Water Discharges Associated with Industrial Activity, the only sector-specific benchmark parameter required to be monitored and reported is Total Suspended Solids (TSS). Accordingly, MBTA finds problematic the need to monitor the discharge for Chemical Oxygen Demand (COD), Iron, Total Magnesium, Manganese, Total Phosphorus, Benzene, Priority Pollutants and Whole Effluent Toxicity. Further, MBTA questions the need to sample on multiple occasions per monitoring event. The MBTA believes that monitoring for TSS, the sector-specific benchmark parameter, and other Conventional Pollutants (Flow, Oil & Grease, and Fecal Coliform Bacteria), in combination with the other discharge limitations, once per sampling event is sufficiently protective of public safety, human health and the environment.*

**Response:** As the permittee had observed, the only sector-specific benchmark parameter required to be monitored and reported in Sector P of the proposed 2006 Storm Water Multi Sector General Permit for Industrial Activities is Total Suspended Solids (TSS). If the permittee were covered by that permit (which has not in fact been issued) its only required effluent testing would be for that pollutant. However, the proposed permit action is the reissuance of an individual permit. Given the history and complexity of the site and the pollutants contained in the discharge, EPA and MassDEP believe that it is appropriate to continue coverage under an individual permit.

In drafting the permit EPA did compare the parameter benchmark values included in Table 3 of the 2000 Storm Water Multi Sector General Permit for Industrial Activities with the available effluent data in order to help establish monitoring requirements in the draft permit. We have reviewed these monitoring requirements to determine whether it may be appropriate to remove any parameters from the permit. This review showed that concentrations of COD and manganese are well below the benchmark values. Monitoring of these parameters has therefore been eliminated.

Concentrations of other benchmark pollutants, iron and magnesium, exceeded the benchmarks set forth in the 2000 MSGP and show a 'level of concern'. Those parameters have been retained in order to evaluate whether the required BMPs adopted in the SWPPP are effective. The permittee should note that the permit allows it to request a reduction in monitoring following one full year of consecutive effluent values less than the benchmark values.

Monitoring requirements for total phosphorus, benzene, priority pollutants and whole effluent toxicity were included in the draft permit based on data in the application and historic use at the location. At the end of the first year of priority pollutant sampling, EPA will review the data and modify the permit to establish an effluent limitation or require additional sampling, if necessary.

EPA storm water sampling guidance and the NPDES Application 2F for Storm Water Discharge Associated with Industrial Activity calls for the collection of a grab sample within the first 30 minutes of discharge and a flow weighted composite collected for the first 3 hours or the entire event (if event is less than 3 hours). EPA determined that it would be as effective for the permittee to collect a grab sample within the first 30 minutes and then two (2) additional sets of grab



samples, one at 1 hour after discharge and one at 3 hours after discharge rather than a composite sample.

Comment A.6. *One of the conditions in the draft NPDES Permit is that a Collection System and Facility Evaluation Study be completed within one (1) calendar year of the effective date of the permit. The MBTA wants it acknowledged that to satisfy this condition, it will be necessary to secure access agreements from third parties, and permits and approvals from multiple regulatory agencies. For example, Part I.B.1.a of the draft NPDES Permit requires the MBTA to determine the current condition and capacity of the triple culvert from the oil/water separator to the point of discharge. To accomplish this task, access agreements will be required from third parties, and permits and approvals will be required from MA DEP, U.S. Army Corps of Engineers, Boston Conservation Commission, Cambridge Conservation Commission, Massachusetts Department of Conservation and Recreation (MA DCR), a co-permittee, and potentially other regulatory agencies. The MBTA cannot guarantee that all of the agreements, permits, and approvals required can be obtained within the one (1) calendar year timeframe because it does not control the time required to issue and/or execute such agreements, permits, and approvals. Moreover, the MBTA cannot control or predict the time necessary to adjudicate a permit or an approval in the event that it is appealed either through an adjudicatory process or in a court having the appropriate jurisdiction.*

*The MBTA is recommending that a two-step process be adopted that requires the permittees to undertake those activities under their control within a specific timeframe while providing the necessary flexibility for the issuance and/or execution of agreements, permits, and approvals, which are outside the control of the permittees. The MBTA is recommending that the first step require the permittees to file all necessary permit and approval applications and access agreement drafts with the appropriate regulatory agencies and third parties within six (6) to nine (9) months from the effective date of the final NPDES Permit. For example, the MBTA will need this amount of time because it plans to install a cofferdam in the Millers River and remove the sediments currently covering the outfall pipes, which is the necessary first step to conduct the Collection System and Facility Evaluation Studies. The final NPDES Permit should then establish a second timeframe for completing the task required to satisfy the condition. The MBTA would recommend nine (9) to twelve (12) months from the receipt of the last permit or approval or access agreement for this step. Specifically, the MBTA believes that it could submit the Collection System and Facility Evaluation Studies within this period following receipt of all necessary permits, approvals, and access agreements. It is the MBTA's opinion that this approach will provide the U.S. EPA with the ability to require the conditions in the final NPDES Permit to be satisfied in a way that is achievable by the permittees.*

Response: EPA recognizes the complexities involved in completing this study and the extensive work to be completed by the MBTA. However, EPA believes that a more ambitious schedule than that proposed by the MBTA can be accomplished.



On April 25, 2007, the MBTA signed an Administrative Consent Order (ACO) and Notice of Noncompliance (NON) with the MassDEP. It is noted that the MBTA entered into the Consent Order without admitting or denying the facts or allegations, but also agreed not to contest the facts or allegations. The ACO includes a schedule for completing a drainage study and an oil/water separator and pump station upgrade plan. The requirements of these studies are consistent with the requirements of the Collection System and Facility Evaluation Studies required in draft NPDES permit. EPA has adopted the schedule in the ACO as consent to by the MBTA

The revised schedule is as follows: On or before September 1, 2007, the MBTA shall submit to EPA and MassDEP a scope of work and proposed schedule for completing the Collection System and Facility Evaluation Study identified in Part I.B.1 of the permit. The co-permittees and MBTA must submit their studies to the EPA, MassDEP and MBTA/MBCR by September 1, 2008. Also, as required in the ACO, the MBTA shall submit interim reports updating the progress of activities and the funding of those activities on or before the 15<sup>th</sup> day of January, April, July and October. A completed study, which integrates the co-permittee's studies and the MBTA's study in to a cohesive study of the entire drainage area, must be submitted by December 30, 2008.

Again, based on EPA's understanding and information in the RAO referenced in Comment A.4, the MBTA leases the oil/water separator property from B&M. As such, the MBTA should be able to begin elements of the study prior to the approvals necessary to install a cofferdam and remove the sediments covering the outfall pipes.

Comment A.7: *The Collection System and Facility Evaluation Studies require third parties, including the City of Somerville and B&M, to conduct evaluations of the infrastructure on their respective properties. The MBTA wants to point out that the oil/water separator chambers and discharge into the outfall culverts are entirely on property now or formerly owned by the B&M. The MBTA questions how, when, and in what format it will receive information from the B&M and City of Somerville on the infrastructure located on their respective properties. The MBTA is further concerned about how it can "complete a full system evaluation and submit a report within one (1) calendar year of the effective date of this permit" if the City of Somerville and/or the B&M fail to undertake the required studies, or fail to make the information available within a reasonable period of time prior to the deadline. The MBTA would recommend that within nine (9) to twelve (12) months after the City of Somerville and B&M complete their evaluations that the Collection System and Facility Evaluation Studies be submitted by the MBTA. Moreover, the MBTA believes that Parts I.B.1.b and I.B.1.c of the draft NPDES Permit should also be imposed upon the B&M and the MA DCR, which only is appropriate as the owners of the oil/water separator and weir structure infrastructure, respectively.*

**Response:** As noted previously, the RAO referenced in Comment A.4 by the MBTA states that the MBTA leases the oil/water separator property from B&M. This statement is consistent with the fact that the MBTA and MBCR submitted the NPDES application for this discharge.



The draft permit requires the City of Somerville and B&M to evaluate the infrastructure on their respective properties which discharges ultimately to the subject oil/water separator. The MBTA/MBCR are required to evaluate the oil/water separator and the triple culverts (See draft permit Section B.1).

EPA has made revisions to the final permit as mentioned above which requires the co-permittees (B&M and the City of Somerville) to submit their studies to EPA, MassDEP and the MBTA/MBCR by September 1, 2008. EPA has revised the permit; the MBTA is required to submit its completed study, including the incorporation of the studies by the co-permittees, by December 30, 2008.

Comment A.8. *Part I.C.3.b.ii of the draft NPDES Permit references high concentrations of solvents in the collection system, and requires identification of the source of the solvents and their elimination from the storm water system. The MBTA does not believe it is the source of any solvents that may be present in the storm water system. Moreover, the MBTA notes that if a discernable source of the solvents is identified on property owned by others, then the appropriate regulatory agencies should take enforcement action against the responsible party and require elimination of the solvents from the storm water system.*

Response: A Risk Identification and Assessment/Material Inventory is a standard requirement for a Storm Water Pollution Prevention Plan and is included, for example, in the Multi-Sector General Permit. The word "permittees" in the last sentence of Part I.C.3.b.ii has been replaced by "permittees and co-permittees" to make it clear that both the permittees (MBTA and MBCR) and the co-permittees are required to do this work for property under their operation. If source(s) of solvents are found and not eliminated, an appropriate enforcement action may be taken.

Comment A.9. *The Fact Sheet (Page 9 of 16 – 2<sup>nd</sup> Paragraph of Outfall 001 – Conventional Pollutants (Flow)) states that MBTA/MBCR "must continuously measure the total daily flow into Chamber 2 and out of Chamber 4 to assure all influent is treated prior to discharge". It must be noted that there is currently no way to measure flow out of the oil/water separator, as the discharge leaves the unit in three inaccessible 48-inch diameter pipes from two chambers. The MBTA believes that improvements will need to be made to this facility to satisfy this condition. This activity cannot commence until a cofferdam is installed, the effluent piping is evaluated, and the need for improvements to the oil/water separator are determined. Again, the schedule and sequencing of events is critical and calls for an Action Plan, as defined in the General Comment section of this letter.*

Response: The draft permit required MBTA/MBCR to continuously measure the total daily flow into chamber 2 and out of chamber 4. Flow through the oil/water separator has historically been estimated based on pumping rates from Chamber 4, but these rates have been far less than the estimates of runoff from the site. Monitoring at Chamber 2, the influent end of the oil water separator, and Chamber 4, the pump location, was required to show whether the previous



estimates of discharge flow were accurate, and whether any flow was discharged by gravity via Chamber 6, or was discharged to groundwater via the permeable bottom of the oil/water separator.

Flow measurement will be an important part of the Collection System and Facility Evaluation Study to ensure that conveyance and treatment systems are properly sized. Given the new information regarding the contaminated groundwater on site, EPA has changed the flow measurement requirement. The permittee is now required to measure flow into chamber 1, which can be done with pressure and velocity meters and a data logger. The MBTA/MBCR is also required to measure, not estimate, the flow leaving chamber 4.

Comment A.9. *As mentioned above, the MBTA believes that monitoring for the Conventional Pollutants including Flow, TSS, Oil & Grease, and Fecal Coliform Bacteria, in concert with the other discharge limitations, one time per monitoring event is sufficiently protective of the public safety, human health, and the environment. The MBTA believes the incremental cost of monitoring for the additional non-conventional pollutants, and collecting multiple rounds of samples per monitoring event, is substantial and disproportionate to the incremental benefit of protections under the National Pollutant Discharge Elimination System and other non-pecuniary values.*

Response: Please see the response to Comment A.5.

Comment A.10. *Part VII of the Fact Sheet discusses an Ambient Sampling Plan to evaluate water quality conditions in the Millers River. The U.S. EPA theorizes that sediments present in the outfall pipes may contain residual petroleum that is carried to the water surface, causing an oily sheen across the river's surface. The MBTA notes that in order to access the outfall pipes to evaluate their conditions and capacities, a cofferdam must be built in the Millers River; this will allow the sediments in and around the outfall pipes be to characterized, dredged, and properly disposed. The MBTA believes that this approach will remove the potentially impacted sediments from the Millers River environment, and obviate the need for the Ambient Sampling Plan. The MBTA further believes that the water quality in the Millers River is impacted by numerous additional sources, and that it is not possible to discern quantifiable impacts to the Millers River from the MBTA's discharge, given so many other sources affecting the water quality.*

Response: As noted in the Fact Sheet, EPA has observed, on several occasions, an oily sheen on the surface of the Miller's River upstream of the boom located immediately downstream of the MBTA's discharge. At the times this sheen has been observed it is also possible to see boils where it is believed the triple culverts discharges to the Miller's River. The source of the sheen is not conclusive. It may be due to pollutants in the discharge or it may be due to scouring of pollutants from the river sediments by the discharge.

Following two (2) full years of data from the Ambient Sampling showing that the discharge does not cause or contribute to violations of the State Water Quality



Standards, the permittee may submit a written request that the frequency of sampling be reduced.

The Ambient Sampling Plan language has been adopted into the final permit.

**B) Comments dated February 5, 2007 by Richard A. Davey, Jr., General Counsel, Massachusetts Bay Commuter Railroad Company.**

Comment B.1.: *MBCR notes that it is under contract with Massachusetts Bay Transportation Authority ("MBTA") to operate MBTA's commuter rail passenger system for a defined period of five years; that period ends on June 30, 2008. While a contract extension beyond that date is a possibility, there is no guarantee as to whether a contract extension will occur, or the period of any possible extension. MBCR believes the Authorization to Discharge under the National Pollutant Discharge Elimination System should contain a "sunset" provision that terminates MBCR's status as a "Permittee" and all of its obligations there under contemporaneous with the end of MBCR's contract with MBTA.*

**Response:** EPA believes the existing NPDES regulations found at 40 CFR 122.61 (b) provide a mechanism for terminating MBCR's status as a permittee at the end of its contract with the MBTA. The regulations allow an NPDES permit to be automatically transferred to a new permittee, if, the current permittee notifies the Director at least 30 days in advance of the proposed transfer date. The notification must also include a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them.

Comment B.2. *The draft Authorization to Discharge requires Collection System and Facility Evaluation Studies be completed within (1) calendar year of the effective date of the permit. MBCR notes that to accomplish certain aspects of the work, it will be necessary to secure access agreement from third parties, and permits from multiple regulatory agencies. For example, Part I.B.1.a of the draft Authorization to Discharge requires the MBTA to determine the current condition and capacity of the triple culvert from the oil/water separator to the point of discharge. To accomplish this, access agreements will be required from third parties, and permits will be required from MassDEP, U.S. Army Corps of Engineers, Boston Conservation Commission, Cambridge Conservation Commission, and potentially other regulatory agencies. MBCR cannot guarantee that the access agreements required can be obtained and cannot control the time required to secure such agreements. Therefore, MBCR proposes that an alternative schedule be developed based on timelines tied to the issuance of necessary permits and access agreements. These permits required and subsequent timelines should be tied to a work plan that defines the work and the order of the work.*

**Response:** Please see the response to comment A.5.



Comment B.3.: *The Collection System and Facility Evaluation Studies require third parties, including the City of Somerville and B&M, to conduct evaluations of the infrastructure on their respective properties. MBCR notes that the oil/water separator chambers and discharge into the outfall culverts are entirely on property now or formerly owned by the Boston & Maine Corporation. MBCR questions how, when, and in what format it will receive information from the B&M and City of Somerville on the infrastructure located on their respective properties. MBCR further questions about how it can "complete a full system evaluation and submit a report within one (1) calendar year of the effective date of this permit" if the City of Somerville and/or the Boston & Maine Corporation fail to undertake the required studies, or fail to make the information available within a reasonable period of time prior to the deadline.*

Response: Please see the response to Comment A.6.

Comment B.4. *MBCR believes that Parts I.B.1.b. and I.B.1.c. of the draft Authorization to Discharge appropriately should be incumbent upon the Boston & Maine Corporation and the Massachusetts DCR, as they own the oil/water separator and weir structure infrastructure.*

Response: Please see the response to Comment A.6.

Comment B.5. *Part I.C.3.b.ii. of the Authorization to Discharge references high concentrations of solvents in the collection system, and requires identification of the source of the solvents and their elimination from the storm water system. MBCR notes that it does not believe it is the source of any solvents that may be present in the storm water system.*

*MBCR notes that if a discernable source of the solvents is identified on property owned by others, then the appropriate regulatory agencies should take enforcement action against the responsible party and require elimination of the solvents from the storm water system.*

Response: Please see the response to Comment A.7.

**C) Comments dated February 3, 2007 by Clinton P. Wright, Staff Attorney, Boston & Maine Corporation**

Comment C.1. *Foremost, the B&M submits that, while it does not object to providing the type of information necessary to comply with the permit's terms, it may encounter difficulty procuring and submitting the requisite information within the one (1) year period following the permit's effective date.*

Response: EPA believes the September 1, 2008 deadline provides the B&M a sufficient period of time to gather the required information. Much of the required information may have already been gathered for the preparation of the Storm Water Pollution Prevention Plan and the Notice of Intent which is required in order to apply for the NPDES General Permit for Storm Water Discharges from



Construction Activities. The Construction General Permit (CGP) is required for any construction activity that will disturb one or more acres and has the potential to have a discharge of storm water to a water of the United States.

It is also noted that the final permit has been revised from the draft version to require a copy of B&M's study to be submitted to the MBTA/MBCR as well as EPA and MassDEP.

Comment C.2. *With regard to the foregoing, please be advised that the Property has been contributed by B&M to a Limited Liability Company that is actively engaged in the development of the Property, and that this development is expected to continue over the course of several years. Accordingly, while the B&M has been working with the appropriate federal, state and local regulatory agencies to ensure that proper storm water and drainage techniques are in place, it must be noted that the overall plan for the development may be altered as each parcel is developed. Given the amount of time over which these parcels will be developed, therefore, it is difficult for the B&M to submit the information requested by EPA that will be certain to remain unchanged for a time certain. Therefore, the B&M would propose to work with EPA to identify plans and specifications for a general drainage and storm water management plan for the entire site, with the understanding that these plans and specifications are preliminary and subject to change.*

**Response:** EPA recognizes that the development of the B&M property is long-term and ongoing; however, much of the information about the current state of this site should be available. Also, given that this development project is subject to the Construction General Permit, a Storm Water Pollution Prevention Plan (SWPPP) was required as part of the application. The SWPPP must include a site description which includes an accurate assessment of the potential for generating and discharging pollutants from the site. EPA believes that the information gathered for the SWPPP is similar to the information being required from B&M under this permit; and therefore, should be readily available.

Comment C.3. *The B&M also has similar concerns regarding its ability to develop and submit a SWPPP that complies with the provisions of the draft and applicable compliance schedule set forth therein. According to Part I.C.1 of the draft, the B&M is required to develop a SWPPP for its property that discharges to the oil/water separator referred to in the draft. Part I.C.2 of the draft then further provides that the SWPPP shall be completed, signed and submitted to the EPA and Massachusetts Department of Environmental Protections ("MassDEP") within ninety (90) days of the permit's effective date and modified as necessary during the life of the permit. Moreover the draft also requires the SWPPP to contain certain information that the development if the Property may preclude the B&M from obtaining or accurately maintaining. As with the information sought in Part I.B.2 of the draft, given the size of the development of the Property and the constant modification of any plan, that timely resubmission of said SWPPP can be made to the EPA and MassDEP for review. It is the B&M's position that the obligation to repeatedly modify the SWPPP will result in the misallocation of valuable B&M, EPA and MassDEP personnel and resources in that their*



*respective personnel will be unduly burdened by the obligation to repeatedly modify and/or review the SWPPP. Hence, the B&M submits that the inclusion of certain information in the SWPPP, per the terms of the draft, is impractical and unduly burdensome and that the draft should be revised to account for the ongoing development of the Property. As noted above, therefore, the B&M is requesting EPA's thoughts and suggestions as to how to effectively treat this development within the context of the permit underlying this letter.*

**Response:** As stated previously, this site is required to be covered by the Construction General Permit (CGP). As part of the CGP application process, the permittee is required to prepare a SWPPP. The permit also requires that an updated SWPPP must be maintained as a permit requirement. Therefore, EPA doesn't believe the SWPPP requirements of this permit are unduly burdensome.

**D) Comments dated February 5, 2007 by Kate Bowditch, Senior Scientist, Charles River Watershed Association and Eloise Lawrence, Staff Attorney, Conservation Law Foundation**

**Comment D.1.** *CRWA and CLF recognize that this draft Permit is a significant improvement from past permits especially because of the inclusion of several parties who are contributing flow to this site. Unfortunately, the draft Permit still does not establish sufficient requirements to ensure that storm water discharges from this outfall will not cause or contribute to a violation of the Massachusetts Surface Water Quality Standards (MA WQS).*

**Response:** It is clearly noted in the fact sheet, that there is still not a complete understanding of the site. EPA believed it was important to get an updated permit issued while the additional site information was gathered. The Collection System and Facility Evaluation Studies will provide the information necessary to fully understand the extent of the drainage area, the potential pollutants and the capacity and effectiveness of the treatment facility.

The permit also requires the permittees and each of the co-permittees to develop Storm Water Pollution Prevention Plans (SWPPP). SWPPPs are a key means for identifying the Best Management Practices (BMPs) necessary to reduce the pollutants in storm water discharges.

If new information is gathered through the implementation of these requirements and indicates there is a need for additional effluent limitations, the permit can be modified.

**Comment D.2.** *The Millers River is a significantly impaired waterbody that frequently fails to meet water quality standards during wet weather events. Wet weather water quality sampling events conducted by CRWA, Roger Frymire (a citizen volunteer), EPA Region 1 staff, and the permittee have shown the Millers River to be in violation of pathogen standards, and to exceed the "level of concern" for metals, phosphorus, and dissolved oxygen (DO).*

**Response:** EPA believes that requiring permittees and co-permittees to implement BMPs through SWPPPs is the appropriate approach for reducing bacteria levels in the



discharge. The permit also requires that the discharge not cause a violation of the Water Quality Standards for the receiving water. If monitoring data shows that implementation of SWPPPs is not successfully controlling the discharge of pollutants, numerical limits may be considered.

Comment D.3. *It appears that the discharge may also violate the temperature requirements of the MA WQS, as discharges may not be more than 2.8°C higher than ambient water temperatures in the Millers River (see 314 CMR 4.05(b)(2)(a)).*

Response: Effluent data submitted by the permittee in Discharge Monitoring Reports (DMRs) and data collected by EPA do not suggest that this discharge is causing or contributing to a violation of the water quality standard for temperature.

Comment D.4. *In addition, visual observations in the Millers River during wet weather events have confirmed the presence of oil sheens, floatables, visible sediment plumes, and high volumes of easily suspended fine organic bedded sediments. Storm water discharges are clearly responsible for these frequent violations of water quality standards, as well as the enormous accumulation of sediments that are presumably toxic based upon the land uses in the drainage area.*

Response: EPA believes the Evaluation Studies and the development of new Storm Water Pollution Prevention Plans will allow for the identification of the sources of these pollutants and lead to their elimination.

Comment D.5. *As CRWA and CLF's own investigations and efforts to address water quality, flooding and CSO problems have made clear, and the information in the EPA Fact Sheet confirms, drainage problems in the area tributary to this outfall are severe, persistent and complex. In its filings, the MBTA has failed to identify many basic facts about the existing infrastructure and the areas that drain to it. The current drainage infrastructure is clearly inadequate both in terms of size and capacity, and in terms of water quality controls.*

Response: The current understanding of the collection system and the treatment facility is not comprehensive, as was noted in the fact sheet. The Collection System and Facility Evaluation Studies were included as a permit requirement to provide a complete understanding. EPA believed it was important to reissue the permit with these conditions.

Comment D.6. *The MBTA's failure to address the problems in the Millers River drainage area has contributed to ongoing pollution of the Millers and Charles Rivers, and to the failure of drainage infrastructure at times in the City of Somerville. Since it is evident that not all of the flow from this drainage area actually reaches the Millers River, flows from this drainage area are likely contributing unauthorized storm water flows into the Massachusetts Water Resources Authority (MWRA) combined sewer system.*



*In the 1990's, the MBTA, in an effort to reduce flooding problems on its own tracks, designed a large drainage infrastructure improvement plan, some elements of which have been completed in the past decade. However, it failed to complete the critical downstream elements of the plan, leaving in place an antiquated water quality treatment facility with inadequate flow capacity, partially blocked discharge culverts, and no adequate maintenance or monitoring provisions.*

*The MBTA's failure to complete this project has been widely criticized, even by EPA itself:*

*Neither B&M nor MBTA fulfilled their drainage promises. As a result, storm water from a large portion of Somerville and from the North Terminal Area ponds on site, flooding the Msgr. O'Brien highway and causing CSO backflows in Somerville. This impedes efforts by Somerville to separate about 100 acres of combined sewer area, and frustrates efforts by BWSC to separate about 100 acres of combined sewer area.*

*Since 1995, millions of dollars have been spent by private entities and municipalities to improve storm water discharges, and to clean up the Charles River. Yet, throughout this period, the MBTA has failed to invest sufficiently in the Millers River storm water drainage infrastructure to protect the Millers and Charles rivers, to prevent combined sewer backflows into Somerville, and to prevent surface flooding on the MBTA's own and adjacent properties.*

**Response:** In the April 25, 2007 Administrative Consent Order, MassDEP states that MBTA has contributed to sewer system surcharging and higher volumes of flows from combined sewer overflows (CSOs) by the pumping of storm waters to the McGrath/O'Brien Highway. MassDEP finds that that conduct is in noncompliance with the state regulations at 314 CMR 3.03.

EPA concurs with its earlier statement that the MBTA did not complete construction of the drainage system it proposed and the Massachusetts Executive Office of Environmental Affairs (EOEA) approved. EPA has the authority under the Clean Water Act to require control of point source discharges from the site to waters of the United States sufficient to ensure that the discharges do not cause violations of water quality standards. We cannot necessarily require that MBTA complete construction of the proposed drainage system.

**Comment D.7.** *Part I. A. 1. Effluent Limits - This table should be modified to include numeric limits for bacteria, iron, Total Magnesium, Manganese, and Total Phosphorus as the reported data shows discharges exceeding the "level of concern" for these pollutants.*

- The maximum daily limit for TSS should be reduced to 30 mg/L given the ease of achieving high treatment levels for TSS and the significant problems with accumulated sediments in the receiving waters.*

**Response:** The benchmark level for TSS in the Multi-Sector General Permit is 100 mg/l. EPA concluded that this is an appropriate technology-based limit for TSS.



- *A maximum daily limit for total phosphorus should be set at the EPA's Nutrient Criteria for total phosphorus, 0.0238 mg/L.*

Response: EPA only has a single total phosphorus sample from each of the six (5) stations sampled on August 31, 2004. Only one of these samples is representative of the effluent quality. The other samples were collected at locations where off-site flows enter the collection system. The effluent sample had a concentration of 0.19 mg/l. This is not enough data to support a phosphorus limit. The MBTA/MBCR is required to report the total phosphorus concentration in the effluent once permit quarter. If the data shows reasonable potential for an exceedence of the water quality criteria, the permit may be modified and an effluent limit established.

- *A maximum daily limit for iron should be set at 1.0 mg/L in accordance with EPA's national water quality criteria.*

Response: The effluent concentration of iron exceeds the benchmark value; therefore, EPA has required the MBTA/MBCR to monitor the discharge for iron. The permittees and co-permittees are each required to develop and implement a SWPPP. We believe that implementation of best management practices through an SWPPP is the appropriate tool for reducing the discharge of pollutants from storm water discharges associated with industrial facilities. If monitoring data shows that implementation of SWPPPs is not successfully controlling the discharge of pollutants, numerical limits may be considered.

- *Temperature should be monitored and reported to ensure that the discharge does not exceed ambient temperatures by more than 2.8°C. Thermal and phosphorus loading are of particular concern given the widespread Microcystis blue-green algae outbreak on the Lower Basin last summer.*

Response: EPA has established a monitoring requirement for temperature in the permit.

- *The bacteria effluent limit should be modified to reflect recent changes in state law. Specifically, Massachusetts has switched its pathogen indicator for more harmful pathogens from fecal coliform to E. coli. The new standard states "the geometric mean of E. coli samples taken within the most recent six months shall not exceed 126 colonies per 100 ml typically based on a minimum of five samples and no single sample shall exceed 235 colonies per 100 ml...." (See 314 CMR 4.05(3)(b)(4)). The permit should include these numeric effluent limits.*

Response: As previously stated, we believe that implementation of BMPs through the SWPPP is an appropriate approach to controlling bacteria levels in the discharge. Also, EPA has not yet approved the Massachusetts Surface Water Quality



Standards which include the change to E. coli as the pathogen indicator, and so cannot yet establish limits based on these criteria.

- *The numeric limits should also reflect anticipated pathogen Total Maximum Daily Load (TMDL) requirements. The permit should clearly require compliance with this and any additional TMDL requirements.*

**Response:** The draft TMDL for the Charles River Watershed has not been approved and does not list this segment as impaired. It does note, however, that storm water NPDES permits do not include numerical limitations for pathogens. For storm water discharges to impaired waters addressed in the draft TMDL, the limitation expectation proposed is the water quality standard. EPA notes that the permit requires that the discharge shall not cause a violation of the water quality standards of the receiving waters.

**Comment D.8.** *Part I. A. 1. a. should be revised to reflect the requirements of the Clean Water Act, and should read: "The discharge shall not cause or contribute to a violation..." (italics added).*

**Response:** EPA has made the edit to the final permit.

**Comment D.9.** *Part I. B. A "reopener clause" should apply to all permittees and co-permittees and to all aspects of the Permit.<sup>4</sup> In light of past failures by MBTA, and the City of Somerville, to complete drainage studies and reports on schedule, and the failure of the MBTA to complete major elements of a drainage program upgrade, EPA should specifically condition the permit upon completion of the required evaluation within one year, and clarify that the MBTA's failure to do so may constitute a revocation of the permit.*

**Response:** A reopener clause is included in all NPDES permits and can be found in Part II.A.4.

**Comment D.10:** *Part I. B. A clause should be added clarifying that, if the evaluation studies determine that it is necessary to modify the operation of the infrastructure either upstream or downstream of the oil/water separator, to make changes to the outfall itself, to reroute the discharge to another additional location, or make any additional significant modifications to the overall design and function of the outfall (for example to handle adequately the total volume of flow discharging from the site), then implementation of such a plan will be a requirement of this permit.*

**Response:** The final permit has been changed to require the permittees, MBTA/MBCR, to implement the plan and schedule in the completed study if no comments are received from EPA and MassDEP within 60 days from the date of submission.

**Comment D.11:** *Part I. B. 1. MBTA/MBCR must, in order to comply with the requirements set out in this draft Permit, and to meet the requirements of the Clean Water Act,*



*develop and implement a plan to remove potentially contaminated sediments from the triple culvert from the oil/water separator to the outfall. The study for devising the plan should include an alternatives analysis to determine how to best accomplish this, or whether there are other preferred alternatives to drain the facility. Implementation of the plan should be required under the revised Storm Water Pollution Prevention Plan (SWPPP) to be completed following the study.*

Response: Part B.1.1 requires the permittees to complete a collection system and facility evaluation study. In order to gather the required information, the MBTA/MBCR has indicated that they intend to install a cofferdam and remove the sediments covering the ends of the pipes.

MBTA has consented to submit an Assessment and Remediation Plan to MassDEP by September 1, 2007. This Plan will detail the plan and schedule to restore flow to the three conduit pipes this includes addressing the removal and disposal of any sediments and/or debris. If the permittees determine that it is necessary to remove the sediments, and that removal would change the nature or quantity of pollutants discharged, the permittees are required to notify EPA and MassDEP pursuant to Part IID of the permit. EPA and MassDEP then determine if the proposed activity could be conducted under the existing permit, or if a permit modification would be required or if the proposed activity should be denied permit coverage.

Comment D.12: *Part I. B. 1. MBTA/MBCR must, in order to comply with the requirements set out in this draft Permit, and to meet the requirements of the Clean Water Act, replace the existing oil/water separator. The current facility fails to meet any current standards for Best Management Practices for the control of oil and grease, is inaccessible, and does not allow for automated water quality sample collection. Replacement of the existing oil/water separator should be required under the revised SWPPP to be completed within one year of the completion of the study.*

Response: It is likely that the oil/water separator will have to be replaced. However, a new facility would not necessarily be required if the permittee were able to show that it can achieve the effluent limits and the applicable pollutant benchmarks through source controls.

Comment D.13: *Part I. B. 1., 2. and 3. The scope of work for the studies/evaluations for all three parties should be expanded to include a revised SWPPP as a final product. The Fact Sheet indicates that it is EPA's intent to have the permittees and co-permittees prepare interim SWPPPs, which will be modified based upon the results of the studies/evaluations. The SWPPPs should be designed to treat pollutants of concern, should specify the design and location of proposed BMPs, and should include a maintenance plan.*

Response: These requirements are already required in Section C.



Comment D.14: *Part I. C. 2. This section should be modified to require the preparation and submission of a new SWPPP following the completion of the studies undertaken under Part I. B.*

Response: The draft permit has been revised to require the permittees and co-permittees to submit a final SWPPP following the completion of the Collection System and Facility Evaluation Studies.

Comment D.15: *Part I. C. 3. This section should be modified to reflect the requirements detailed in the Section 8 of the Fact Sheet, including the installation of booms in the Millers River.*

Response: EPA has revised the draft permit to include this provision.

**E) Comments dated January 31, 2007 by Cindy Delpapa, Stream Ecologist, Riverways Program, Massachusetts Department of Fish and Game.**

Comment E.1: *What is immediately apparent upon reading the permit packet for this draft permit is the complexity of this discharge. We commend the agencies in collecting information and assessing conditions in the field in order to better understand the intricacies of the collection and treatment system. Clearly the treatment system is servicing a much larger area than the rail maintenance facility and there are multiple owners of property and infrastructure. The situation certainly warrants the expansion of responsibility for the effluent quality and we fully support the addition of co-permittees and the attendant responsibilities assigned.*

Response: EPA recognizes the comment.

Comment E.2: *The draft permit requires the co-permittees develop Storm Water Pollution Prevention Plans (SWPPP). This addition is a key improvement to the permit as it is through pollution prevention the greatest water quality gains are likely to occur given the challenges of treating nonpoint source pollution. We would like to suggest a slight augmentation to the permit relative to the SWPPP plan development. Not to belittle the considerable efforts expended by the permitting agencies, the permittee and others to fully characterize the many components associated with this discharge, there is a need for additional missing information. It is our opinion the permitting agency wisely chose to issue the draft permit with a requirement to complete a comprehensive collection and treatment system study rather than delay the issuance of the draft and final permit pending the completion of this study. It is also logical to request an interim SWPPP plan pending the outcome of the comprehensive assessment. The slight modification would be to require and an assessment of the interim SWPPP within 90 days of the completion of the comprehensive collection and treatment system study using the new information to refine each SWPPP.*



Response: EPA agrees with the comment. A requirement for an interim Storm Water Pollution Prevention Plan shall be submitted to EPA and MassDEP within 90 days of the effective date of this permit has been added to the final permit.

Comment E.3: *One additional minor comment concerns one of the requirements of the SWPPP (I.C.3.a.v) which requires a listing of all significant spills and leaks within the past three years. If possible a listing of all known significant spills and leaks should be encouraged as this information has value both as a consolidated record of 'institutional knowledge' and to help prevent unanticipated releases of pollutants.*

Response: We have revised the permit to require a listing of all significant spills and leaks within the past three years and any other significant leaks and spills the permittee or co-permittee may be aware of.

Comment E.4: *The Fact Sheet provided data relating to recent discharge sampling serving as the impetus for the addition of several parameters to the draft permit. From the information provided it appears the concentrations of total Magnesium is significantly higher than the benchmark concentration developed by EPA. Given the highly elevated levels repeatedly found in the discharge, requiring more frequent monitoring, asking for an estimate of loading per year and potential adopting the benchmark concentration as a limitation for this pollutant. It is our belief estimates of loading for iron, COD, manganese and total phosphorus would also be useful information as it would be useful when developing and refining the SWPPPs, improving treatment technologies and making management decisions for the Charles River and Boston Harbor.*

Response: Please see the response to Comment D.2.

Comment E.5: *A tangentially related matter concerns the observed MBTA/MBCR personnel pumping storm water(?) onto Rte 28. We agree this practice should be review by both the City of Somerville and the MWRA but we would also like to suggest these sorts of alterative storm water management actions be addressed in the MBTA/MBCR SWPPP.*

Response: As noted in the response to Comment D.6., this practice has been identified by MassDEP as non-compliant with 314 CMR 3.03 and was addressed in the ACO/NON.

The permittees and co-permittees are required to report to EPA and MassDEP any discharges within this drainage area other than to the subject oil/water separator.

Comment E.6: *The draft permit will require the addition of a downstream boom on the Millers River. While this is a protective measure and observations by EPA staff suggest it is a much needed measure, it is one that does not address the underlying problems with the collection and treatment system associated with this permit. If*



*the questionable integrity of the oil/water separator is recognized by all, it seems the prohibitions in the draft permit (I.A.1.d) against visible oil sheen in the receiving water would suggest the delay of addressing the oil/water separator poor performance until the site is redeveloped would result is unacceptable. Despite the open-ended delay allowed under the MA Contingency Plan, the existing conditions are likely to result in continued frequent violations of the NPDES permit- permit violations enforceable by law. We hope the limitations within this draft permit provide the sufficient catalyst to rectify the observe problems with the existing treatment system.*

**Response:** An absorbent boom had been installed and maintained by the Central Artery Tunnel Project (CA/T) in the Millers River during their construction. The CA/T has recently completed construction in the area and is no longer required to maintain a boom. Considerable work is required to determine the efficiency and capacity of the oil/water separator. As discussed by previous commenters, the timeline for completing this work is significant. EPA is requiring that the MBTA/MBCR install and maintain an absorbent boom until the pollutant sources are resolved.